5E-C5508
Automatic Calorimeter

Standard Configuration

Main analyzer: Controlling Unit and Chiller
Oxygen Vessel
Data System (PC & Printer)
Crucibles
Ignition Wire
Benzoic Acid
O-ring kit
Tool kit

Optional Configuration

Lens paper
Pellet press
Halogen Resistant Oxygen Vessel

Features

With all 5E-C5500 features, additionally:

Fully Automatic Oxygen Charging System

Integrated oxygen charging system, straight connection to oxygen cylinder via regulator, controlled by solenoid valve, 5E-C5508 is available for oxygen charging automatically.

Fully Automatic Oxygen Vessel Lifting System

Convenient operation compared with manual filling, in case of any slipping off. Water filling and draining during lifting, minimize the time for analysis and preparation.

Test Data

calibrate mass, g	temperature rise	°C or °F	as-determined heat capacity	units
0.8207	2.1783	°C	9885	J/K
0.8115	2.1811	°C	9887	J/K
0.8881	2.3862	°C	9888	J/K
0.9111	2.4498	°C	9880	J/K
0.9746	2.6188	°C	9885	J/K
0.9965	2.6735	°C	9878	J/K
1.0957	2.9393	°C	9879	J/K
1.2052	3.2391	°C	9880	J/K
1.1251	3.0238	°C	9889	J/K
1.2214	3.2827	°C	9879	J/K
Average:9883J/K			RSD:0.043%	

Remark: ASTM-D5865, the precision of ten acceptable calibration test runs shall have a relative standard deviation (RSD) no greater than 0.17% and CKIC's specification is less than 0.05% RSD.
Conclusion: 5E-C5500 Automatic Calorimeter exceeds the ASTM Precision Requirement.

Specification

Model	5E-C5500	5E-C5508	5E-AC/PL
Conforms to Method	AS 1038.5, ASTM D5865, ASTM D4809, ASTM E711, BIS 1350, BS EN 15400, GB/T 213, GB/T 30727, ISO 1928, ISO 9831		
Precision (1g Benzoic Acid)	0.05%RSD*		
Measuring Range	Up to 40MJ/kg		
Temp. Resolution	0.0001˚C		
Control Ability	2 Units/1 PC available		
Analysis Time per Sample	Dynamic Method:10mins, Classical Method:15mins		Classical Method: 15mins
Test Per Hour	Single control / Up to 6	Double control / Up to 12	Single control / Up to 6	Double control / Up to 12	Single control / Up to 4	Double control / Up to 8
Jacket Type	Isoperibol		
Vessel Identification	Up to 2 for automatic, several for manual		
Balance Connection	Available		
Network Connection	Available		
Bucket Filling	Automatic		
Oxygen Filling	Semi-Automatic	Automatic	Semi-Automatic
Structure	Benchtop or Vertical	Benchtop	Vertical
Bomb Vessel Lifting	Manual	Automatic	Manual
Power Supply	Single phase, AC220V±10%, 50/60Hz, ⩽500W		
Net Weight	Bench top: 75kg / Vertical type: 103kg	80kg	71kg
Dimensions(L×W×H)	Bench top: 480mm×500mm×420mm (Analysis unit) 370mm×500mm×420mm (Temp. control unit) / Vertical: 480mm×500mm×940mm	Analysis unit: 580mm×550mm×550mm Temp. control unit: 370mm×540mm×400mm	Vertical: 580mm×550mm×950mm

*Test Condition:
1. Ambient temp. 20˚C±1˚C, humidity 75%±5% 2.No strong interference source nearby 3.Clean water circuit with distilled water